



SEQUENCE LISTING

<110> Itoh, Nobuya

<120> Reductase Gene and Use of the Same

<130> 600630-15US (562737)

<150> JP 2003-053568

<151> 2003-02-28

<160> 14

<170> PatentIn version 3.2

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<212> PRT

<213> Leifsonia sp.

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Gly Ser Gly Ile Gly Arg Ala Val Ala Leu Thr Leu Ala Ala Ser Gly

20

25

30

Ala Ala Val Leu Val Thr Asp Leu Asn Glu Glu His Ala Gln Ala Val

35

40

45

Val Ala Glu Ile Glu Ala Ala Gly Gly Lys Ala Ala Ala Leu Ala Gly

50

55

60

Asp Val Thr Asp Pro Ala Phe Gly Glu Ala Ser Val Ala Gly Ala Asn

65

70

75

80

Ala Leu Ala Pro Leu Lys Ile Ala Val Asn Asn Ala Gly Ile Gly Gly

85

90

95

Glu Ala Ala Thr Val Gly Asp Tyr Ser Leu Asp Ser Trp Arg Thr Val

100

105

110

Ile Glu Val Asn Leu Asn Ala Val Phe Tyr Gly Met Gln Pro Gln Leu

115

120

125

Lys Ala Met Ala Ala Asn Gly Gly Gly Ala Ile Val Asn Met Ala Ser

130

135

140

Ile Leu Gly Ser Val Gly Phe Ala Asn Ser Ser Ala Tyr Val Thr Ala

145

150

155

160

Lys His Ala Leu Leu Gly Leu Thr Gln Asn Ala Ala Leu Glu Tyr Ala

165

170

175

Ala Asp Lys Val Arg Val Val Ala Val Gly Pro Gly Phe Ile Arg Thr

180

185

190

Arg Ser Trp Arg Gln Pro Leu Arg Arg Arg Ala Gly Val Pro Arg Gly

195

200

205

Lys His Ala Leu Gly Arg Leu Gly Glu Pro Glu Glu Val Ala Ser Leu

210

215

220

Val Ala Phe Leu Ala Ser Gly Ala Ala Ser Phe Ile Thr Gly Ser Tyr

225

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235

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His Leu Val Asp Gly Gly Tyr Thr Ala Gln

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gca gcc gtc ctc gtc acc gac ctg aac gag gag cac gcg cag gcc gtc	144
gtg gcc gag atc gag gcc gcg ggc ggt aag gcc gcc gcg ctc gcg ggc	192
gac gtg acc gac ccc gcg ttc ggc gag gcg agc gtc gcc ggg gcg aac	240
gct cta gcg ccc ctc aag atc gcg gtc aac aac gcg ggc atc ggc ggc	288
gag gcc gcc acg gtc ggc gac tac tcg ctc gac agc tgg cgc acg gtg	336
atc gag gtc aac ctc aac gcc gtg ttc tac ggg atg cag ccg cag ctg	384
aag gcc atg gcc gcc aac ggc ggc ggt gcg atc gtc aac atg gcg tcc	432
atc ctg gga agc gtc ggc ttc gcc aac tcg tcg gcc tac gtc acg gcc	480
aag cac gcg ctg ctc ggt ctc acc cag aac gcc gcg ctc gag tac gcc	528
gcc gac aag gtg cgc gtc gtc gcg gtc ggc ccc ggc ttc atc cgc acc	576
cgc tcg tgg agg caa cct tcc cgc cga cgc gct ggc gtt cct cga ggg	624
aag cac gcc ctc ggc cgc ctg ggc gag ccg gaa gag gtc gcc tcg ctg	672
gtc gcg ttc ctc gcc tcc ggc gcc gcg agc ttc atc acc ggc agc tac	720

cac ctg gtg gac ggc ggc tac acc gcc cag tga

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<210> 3

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<212> DNA

<213> Artificial sequence

<220>

<223> Designed oligonucleotide primer for PCR

<400> 3

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<210> 4

<211> 20

<212> DNA

<213> Artificial Sequence

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tcactgggcg gtgtagccgc

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<210> 5

<211> 15

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<213> Leifsonia sp.

<400> 5

Ala Gln Tyr Asp Val Ala Asp Arg Ser Ala Ile Val Thr Gly Gly

1 5 10 15

<210> 6

<211> 12

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Ile Ala Val Asn Asn Ala Gly Ile Gly Gly Glu Ala

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<223> n is a, c, g, or t

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<210> 8

<211> 20

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<222> (9)..(9)

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 cctgaacgag gagcacgcgc aggcgcgtcgt ggccgagatc gaggccgcgg gcggtaaggc 180
 cgccgcgctc gcggggcgacg tgaccgaccc cgcgttcggc gaggcgagcg tcgccggggc 240
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 attc 304

<210> 10
 <211> 304
 <212> DNA
 <213> Leifsonia sp.

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cctgaacgag gagcacgcgc aggccgtcgt ggccgagatc gaggccgcgg gcggttaaggc	180
cgccgcgctc gcgggacgacg tgaccgaccc cgcgttcggc gaggcgagcg tcgccggggc	240
gaacgctctc gcgcccctca agatcgcggt caataacgca ggcatcggaa tcactagtga	300
attc	304

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<210> 12

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<212> DNA

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<211> 29

<212> DNA

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<210> 14

<211> 31

<212> DNA

<213> Artificial Sequence

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<223> Designed oligonucleotide primer for PCR

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acaagcttgt gaattcaaca ccagtcagct c

31